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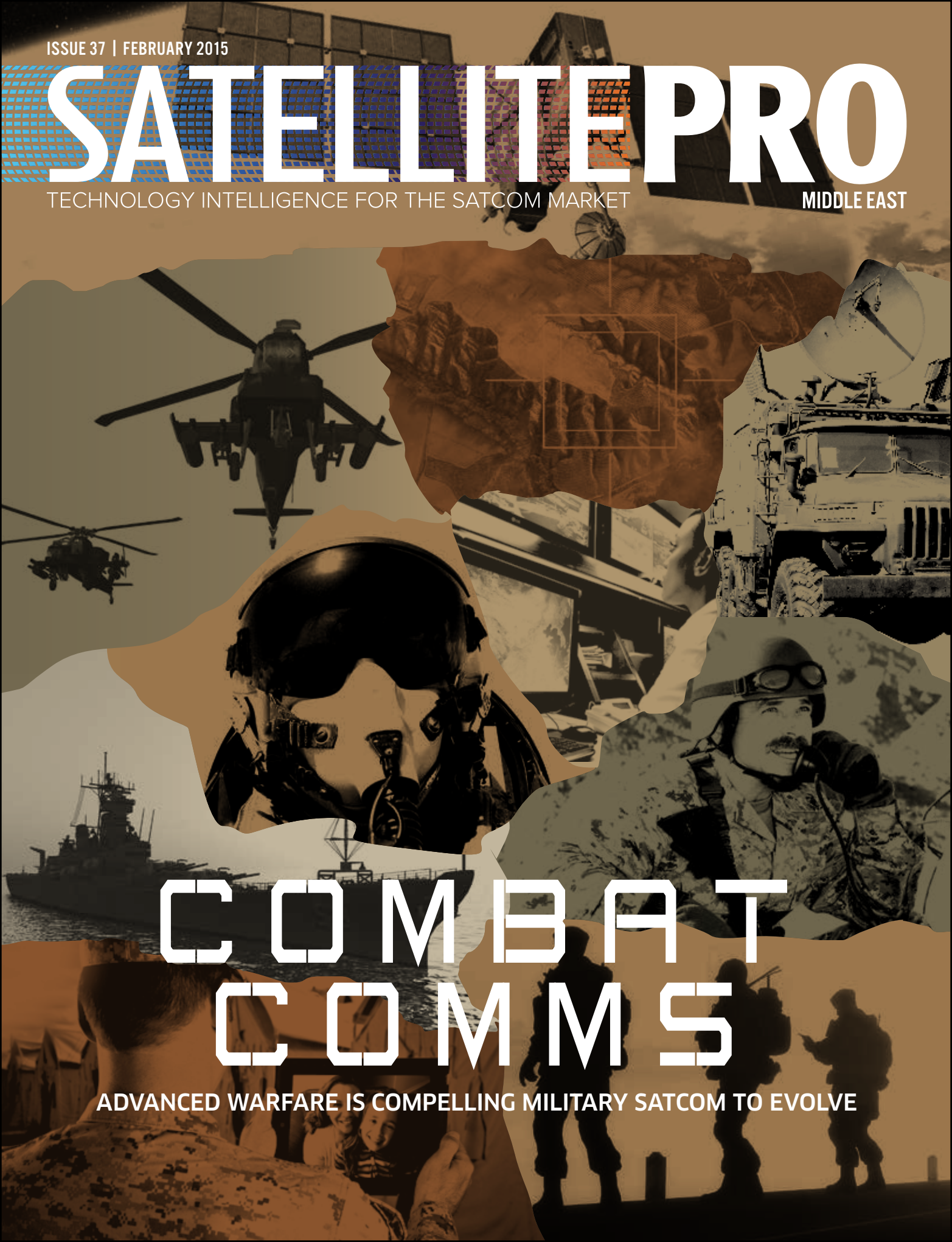
SATELLITE PRO

TECHNOLOGY INTELLIGENCE FOR THE SATCOM MARKET

MIDDLE EAST



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In My Sights

Few things in life will ever mean as much to us as the people we love. We are surrounded by the illusion that nothing will ever happen to them, and that we live in a secure environment, where the bad guys don't dare to tread. While this may be true for some places, the uprisings in Syria, Libya and other countries have shown that life however precious, young or old, is a temporal, transient thing.

Security is of prime importance, and governments invest heavily in the right technology to equip militaries. It's not just about guns and tanks. This is modern warfare. Be it surface to air missiles to down enemy aircraft, or communications on the move for staying up-to-date on the latest developments, satellite is essential. Soldiers are dropped into some of the most inhospitable climes, and the destruction of communication infrastructure is usually the primary target for the enemy. With telephone lines down, and not to mention unsecure, satcom is often the only way forward. Military satcom and VSAT technology is heavily encrypted to secure communications through base stations and those on the move. After all the last thing you want is for the enemy to get access to critical and sensitive information that could severely compromise a mission.

With Milsatcom and IDEX coming up this month, there will be a deluge of exhibitors, visitors and top military decision makers speaking about common challenges and making purchases that will affect the future of advanced warfare. The use of satcom and other satellite-based military technology will be at the core of the Milsatcom Middle East Conference, which will take place from 24-25 February 2015. The Middle East Military Space Symposium will take place on 26 February 2015. Both events will be held at the Ritz Carlton Abu Dhabi, Grand Canal in UAE. I look forward to meeting you there and discussing the undying link between militaries and satellites.

Clayton Vallabhan
Editor

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"We are now successfully providing the highest performance satellite connectivity the world has ever seen to remote parts of the world."
Steve Collar, CEO of O3b
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"Satellite has differentiated itself from other means of communications especially in its inherent support of IP data."
Henrik Norrelykke, VP, Land and Mobile, Cobham SATCOM
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"We've actually combined the GVF Summit now with our Satellite Hub conference feature, so it's a three day free to attend conference programme."
Andrew Pert, Show Director, CABSAT
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"We are very interested in development in this region, because we find that it is a quick growing and abundant market for content delivery services."
Luis Del Valle Aleman, Global BDM, Deutsche Telekom
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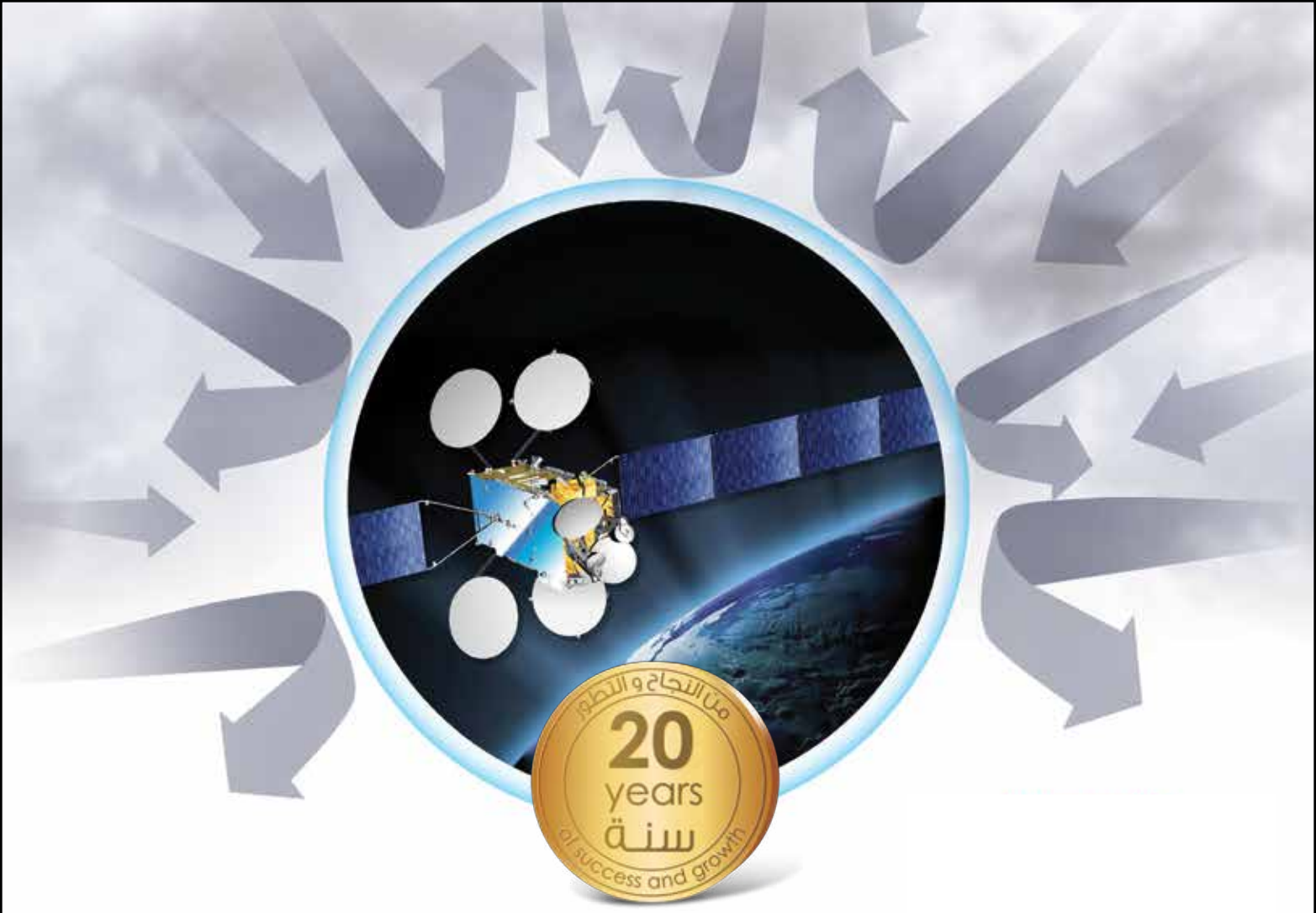

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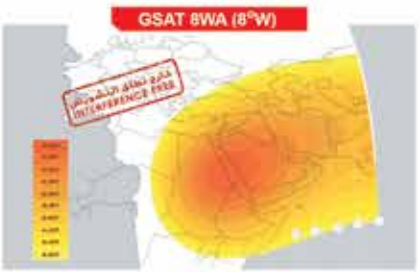

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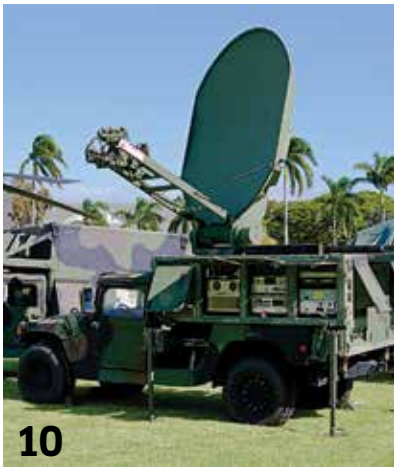
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Du and Anite start operations at Terminal Innovation Lab

Du and Anite have announced the commencement of live operations at its Terminal Innovation Lab in the UAE - a first in the Middle East region.

The facility is equipped with Anite's device and network test solutions. Du, the first telecom service provider in the Middle East to achieve GCF (Global Certification Forum) accreditation, conceptualised the Terminal Innovation lab to improve mobile device testing and validation to further enhance their end-users' experience. Du uses Anite's solutions to efficiently and comprehensively test, validate and troubleshoot mobile devices and benchmark performance in both lab and field based environments to ensure seamless and successful market introduction of new devices. As an integral part of this lab, Anite's wide range of test solutions have enabled Du to readily create an integrated test environment and methodology, leading to significantly improved testing efficiency, handset interoperability and customer experience.

Saleem Al Blooshi, Executive Vice President - Network Development and Operations, Du, said: 'We value Anite's collaboration in establishing the first Terminal Innovation lab in the Middle East. Anite's comprehensive range of solutions for testing devices in the lab as well as in the field will help us to accelerate device assessment, reduce time-to-market and enhance users' experience. Our aim is to achieve customer satisfaction through the highest quality and proven standards. Du continues to present and demonstrate a diversified service portfolio, embracing the latest wireless technologies. This also supports our ambitions to realise the Smart City ambitions of the UAE."

Saleem AlBlooshi, Executive VP - Network Development and Operations, du.

+ www.du.ae

YAHSAT ON TRACK FOR AL YAH 3

Yahsat has announced that they have completed the Preliminary Design Review (PDR) for the Al Yah 3 spacecraft and payload. Al Yah 3, which is based on Orbital's GEOStar-3 platform, is an all Ka High Throughput Satellite to be designed, manufactured and tested at Orbital's satellite manufacturing facility in Dulles, VA.

The PDR was a comprehensive review that validated Orbital's design approach to the physical and functional requirements of the spacecraft. The review is the first step toward confirming that the satellite will operate effectively on orbit.

Marcus Vilaça, Acting Chief Technical Officer, Yahsat said: "The Preliminary Design Review is an industry standard process where our engineers review and confirm the overall architecture and design of our Al Yah 3 satellite. This is a significant step forward in the development phase of Al Yah 3 and ensures that we are on track to launch as scheduled for Q4 2016. While progress is underway with developing our third satellite, we are actively engaging with potential partners in Africa and Brazil."

+ www.yahsat.com

THALES ALENIA HAS BEEN SELECTED BY CNES TO BUILD OCEANOGRAPHY SAT

Thales Alenia has been selected by CNES (Centre National d'Etudes Spatiales) to build its oceanography satellite SWOT (Surface Water and Ocean Topography).

SWOT is an oceanography program that will demonstrate new applications, and is a follow-on to the Jason-1, 2 and 3 operational missions. It is produced in collaboration with U.S. space agency NASA's Jet Propulsion Laboratory (JPL) on behalf of the French and American space agencies. It will incorporate technological innovations in altimetry.

As the name indicates, it is designed to study ocean topography and surface water on the continents. SWOT comprises both an oceanography and a hydrology mission.

For oceanography, the satellite will provide measurements of ocean surface and wave height with higher resolution than its predecessor Jason satellites. This data will be used to analyse and understand the effects of coastal circulation on marine life, ecosystems, water quality and energy transfers, resulting in more accurate models of the interactions between oceans and the atmosphere. The hydrology mission will evaluate continental surface water, to study changes in water storage in humid zones, lakes and reservoirs, as well as flow rates in rivers.

Thales Alenia Space will develop a new-generation platform for the SWOT satellite, offering, for the first time, a controlled atmospheric re-entry of the satellite at end-of-life, in line with the French Space Operations Act. The company will also handle satellite assembly, integration and testing (AIT), delivery to the launch centre, and operations for the launch campaign.

+ www.thalesgroup.com

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Investment in space continues to grow in Middle East

National investment in space technology is continuing to grow, as the UAE seeks to develop a long-term strategic plan for a solid and sustainable foundation for advanced space innovation and exploration. All of which is expected to aid the growth of science and knowledge based economy. Compared to the USD$300 billion international space industry, the UAE's investment in space technology is already substantial exceeding AED 20 billion (USD 5.44 billion).

Leading industry experts from around the world will meet in Dubai at the Global Space & Satellite Forum (GSSF) in May to discuss how commercial space and satellite technology is creating new economic, social and educational benefits for nations globally.

The forum will discuss topics such as space technology applications, innovative solutions; low-cost satellite developments such as macro and nano satellites; and how satellite systems

are improving lives – ranging from life-saving developments in the field of disaster management to the delivery of entertainment media via handheld consumer devices.

Dr Mohammed Naser Al Ahbabi - Director General of the UAE Space Agency said: "We expect this forum to provide an arena that will showcase the competing commercially self-sustaining space programmes which are emerging as a direct result of new space technology trends, leading a new era of space utilisation similar to the one which paved the way for commercial aviation in the first half of the last century. Key to this, we believe, is the development of innovative space technologies and applications, some of which will enable low cost access to space and the emergence of affordable space exploration and human presence in space."

The UAE Space Agency was established in July 2014 with an aim to develop the UAE's technical and intellectual capabilities in space technology and leading the region's entry into the era of space exploration.

+ www.gssforum.com

ETISALAT DEBUTS BUSINESS MULTI SHARE FOR POST-PAID CUSTOMERS

Etisalat is offering its business mobile post-paid customers a service to share a single data plan across multiple devices including smartphones, tablets and laptops.

The new Etisalat's Business Multi Share service offers customers the advantage of connecting up to five simultaneous SIMs under one data plan without the hassle of subscribing to additional data packs.

With this, business owners can maximise their multitasking capabilities by using Etisalat's new cost-saving, single data pack across devices, taking full advantage of the regions' largest and fastest 4G LTE network. Business Multi Share data packs start from just AED60 for 1GB data allowances per month. In addition, customers have the option of buying smartphones or tablets at zero upfront charges with Etisalat's business post-paid plans to use this multi-data access facility optimally.

Commenting on the launch of Business Multi Share service, Salvador Anglada, Chief Business Office, Etisalat said, "Staying well connected is paramount with rising

demands of our highly urban fast-paced lives. It is more so in a business environment, where users need to work across multiple devices in the office, on the move or at home. On an average, a customer today uses three devices to connect to the Internet, the smartphone being the most preferred one; and this trend is only going to grow."

Existing customers subscribed to Etisalat's Business Ultimate or Business Supreme services can register for the Business Multi Share data pack by sending an SMS - MULTI - to 1040.

+ www.etisalat.ae

AL JAZEERA MEDIA NETWORK IS NOW ON ES'HAIL 1

Es'hailSat has announced that Al-Jazeera Media Network (AJMN) is now using the Es'hail 1 satellite located at the 25.5-degree East hotspot neighborhood to broadcast content to the full Middle East and North Africa (MENA) region.

Following one year of successful dual illumination using Es'hail 1 satellite capacity and uplink facilities, Es'hailSat and AJMN said the formal switch over of broadcast services to Es'hail 1 took place on January 1 2015.

Es'hailSat's CEO, Ali Ahmed Al Kuwari said: "We believe that we have the optimum solution for AJMN not only in terms of technical capabilities and performance, but also in terms of independence and security of the content we broadcast. We have designed Es'hail 1 and our second satellite Es'hail 2 with advanced anti-jamming capabilities. Selecting Es'hailSat further demonstrates the value of our broadcasting independence."

+ www.eshailsat.qa

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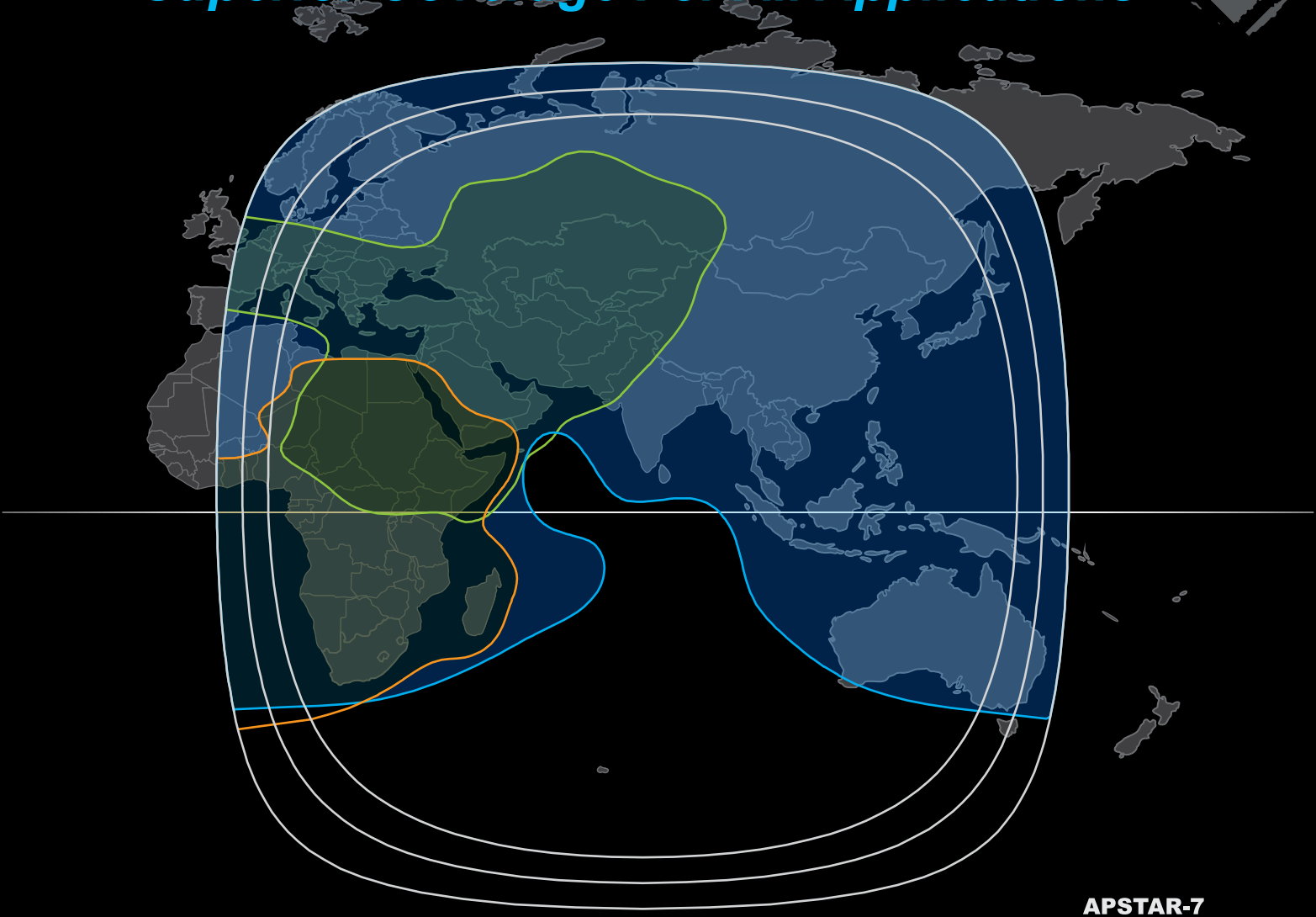

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ViaSat selects Space X for ViaSat-2 launch

ViaSat has selected SpaceX to launch ViaSat-2, the next generation of high-capacity broadband satellite. ViaSat-2 is scheduled for a late summer 2016 launch aboard a SpaceX Falcon Heavy from the Kennedy Space Center in Florida. Falcon Heavy is the world's most powerful rocket, with the ability to lift more than twice the payload of the next closest launch vehicle at only one-third the cost. Falcon Heavy is an evolution of the flight-proven Falcon 9 that is used to launch commercial satellites as well as cargo missions to the International Space Station. Beginning with ViaSat-1, ViaSat began a transformation of satellite communications into a network technology that can provide high-performance services competitive with terrestrial alternatives, rather than being merely a last resort. ViaSat-2 is designed to provide another leap ahead in broadband service quality for residential, mobile, and enterprise satellite services. "One of the primary objectives for ViaSat-2, beyond higher speeds, is to offer more data with all of our service plans. That's what customers want from any wireless service," said Mark Dankberg, ViaSat's Chairman and CEO. "We can do that by building a network with lots more network capacity at a cost that will attract more customers, and that's what this new

Mark Dankberg, Chairman and CEO, ViaSat.

class of satellite is designed to do." ViaSat-2 is expected to cover seven times the geographic area and offer twice the bandwidth economics advantage of ViaSat-1, which is already the highest capacity satellite in the world. Planned coverage includes North America, Central America, and the Caribbean basin. The satellite will also provide a bridge of coverage across the North Atlantic, connecting North America with high-capacity coverage in the UK and Europe for high-speed in-flight internet and other mobile services. Now under construction by Boeing, ViaSat-2 will become the fourth satellite in the ViaSat fleet.

+ www.viasat.com

IN ORBIT TESTING OF ASTRA 2G COMPLETE

Airbus Defence and Space has successfully completed the initial in-orbit testing of ASTRA 2G and has handed over the control of the satellite to SES who will now validate the performance of its communications payload. Afterwards, it will begin operational service at its 28.2/28.5-degrees East orbital location in order to provide next generation broadcast and broadband services. The ASTRA 2G telecommunications satellite was launched by an ILS Proton Breeze M launcher from Baikonur, Kazakhstan, on 27 December 2014 at 21:24 GMT. Launch and Early Orbit Phase operations have been conducted from the Airbus Defence and Space spacecraft control centre in Toulouse. A series of manoeuvres enabled the satellite to reach geostationary orbit on 2 January, the solar arrays and antenna reflectors have been successfully deployed and the satellite has acquired final Earth pointing. All spacecraft functions are performing as expected. Designed and manufactured by Airbus Defence and Space for satellite operator SES, ASTRA 2G is based on the highly reliable Eurostar E3000 platform. It carries 62 Ku-band transponders as well as 4 Ka-band transponders.

+ www.airbusdefenceandspace.com

O3B NETWORKS CONNECT TELECOM OPERATORS IN THE PACIFIC

O3b Networks has announced that clients like Digicel, PNCC and Palau Telecom have now successfully gone live on its 'Fiber in the Sky' satellite network.

Connected to the O3b network, these telecom operators are able to provide their customers high speed broadband service, in some cases for the first time, improving user experience and allowing for more and better services.

Steve Collar

O3b has become an affordable, reliable alternative to expensive undersea fibre for island nations in the Pacific. The use of O3b satellites, which are closer to the earth than conventional geostationary satellites, reduces latency, increases data rates and improves voice and video quality for the user.

O3b's total capacity contracted in the Pacific region is now 5 Gbps. The high throughput, low latency solution has been extremely compelling for region operators trying to meet national broadband plans which are poorly supported by the high latency of GEO or the cost of fibre. It is anticipated O3b will outstrip fibre for international connectivity to individual countries in the region through 2015. The company's clients in the Pacific region include: Digicel PNG, Digicel Samoa, Norfolk Island Telecom, PNCC, Palau Telecom, FSMtC Yap, Telecom Cook Islands and Timor Telecom.

Steve Collar, CEO of O3b, said: "O3b has made enormous progress in the last year. We are now successfully providing the highest performance satellite connectivity the world has ever seen to some of the most remote parts of the world. As such, we are playing a major role in eroding the long-standing digital divide."

+ www.o3bnetworks.com

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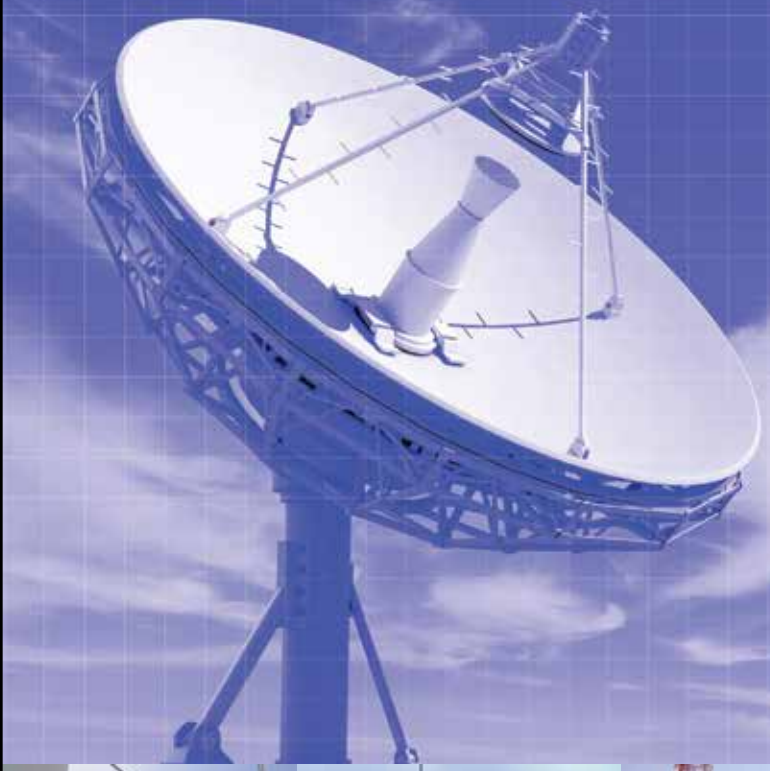

MENA NETS PROVIDES 4 ACTIVITIES TO THE MENA REGION:

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ii. Supply hardware as resellers and authorized distributors of many manufacturers like ASC Signal, Skyware Global, Cobham, Xicom/Comtech, Anacom, Codan/CPI, NJR, SMW, iDirect, Thomson, etc.

iii. Ground operations which includes installation, technical support, maintenance repairs, etc

iv. Training and consulting such as the GVF HOST.

THESE 4 ACTIVITIES ARE DELIVERED THROUGH 6 PRODUCT LINES:

i. Earth station antennae (3.5 meter to 9.4 meter) from ASC Signal

ii. VSAT antennae (75 cm to 2.4 meter) form Skyware Global

iii. Mobile satcom (on the move and on the pause) from Cobham

iv. Outdoor electronics: TWTs, BUCs, LNBs, Feeds, etc from Xicom/Comtech, NJR, Anacom, Codan/CPI, SMW, etc

v. Indoor electronics: broadcast encoders, decoders, multiplexers, video servers, power supplies, combiners, splitters, routers, satellite modems, redundancy controllers etc from Thomson, Paradise/Teledyne, iDirect hubs/modems and others.

vi. Installation, maintenance, support, logistics and training (GVF) and turnkey solutions involving system integration of all activities and product lines to provide customers with a complete end-to-end product. The objective is simple: meets customer needs with the latest technologies at the best price/quality mix delivered through experience.





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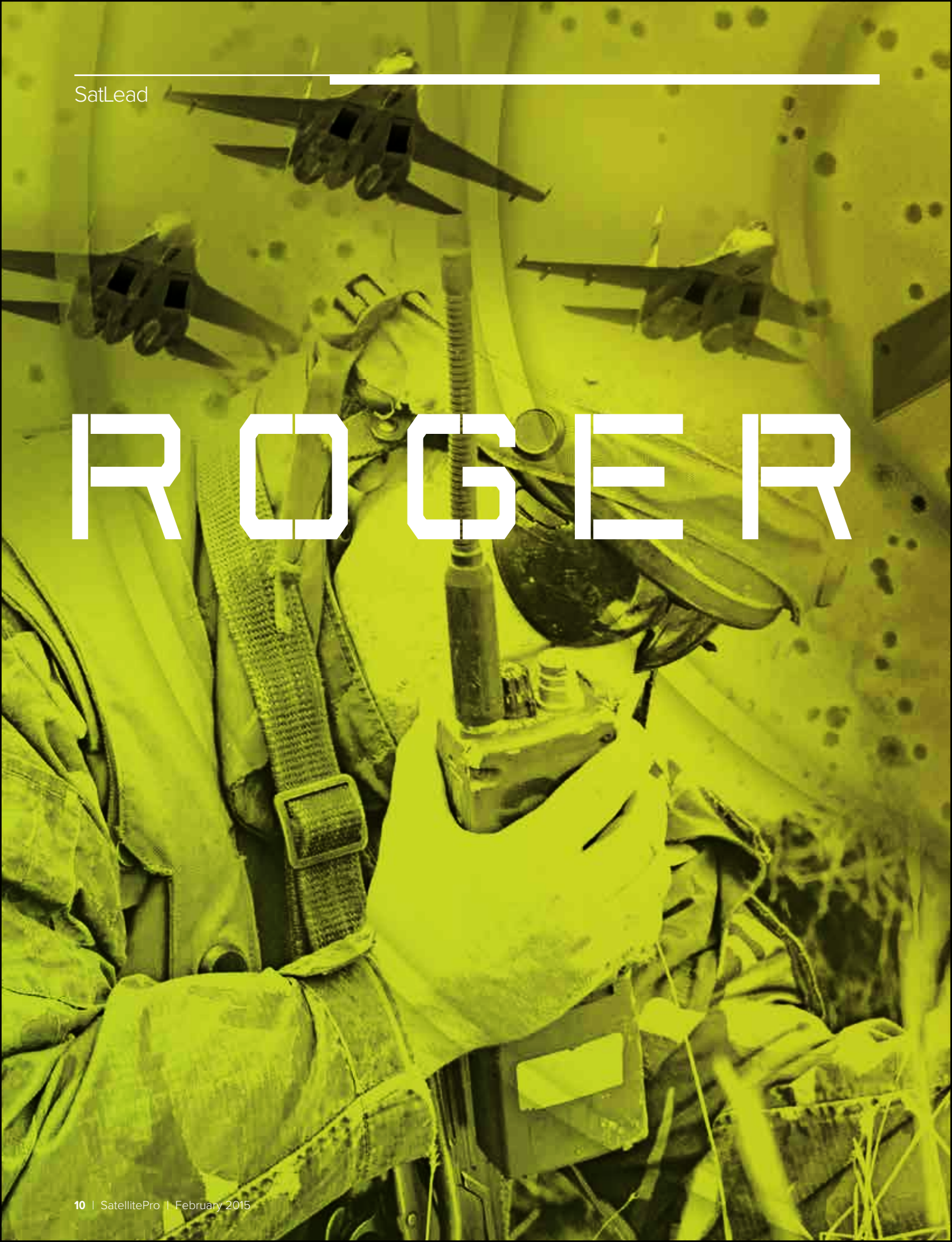
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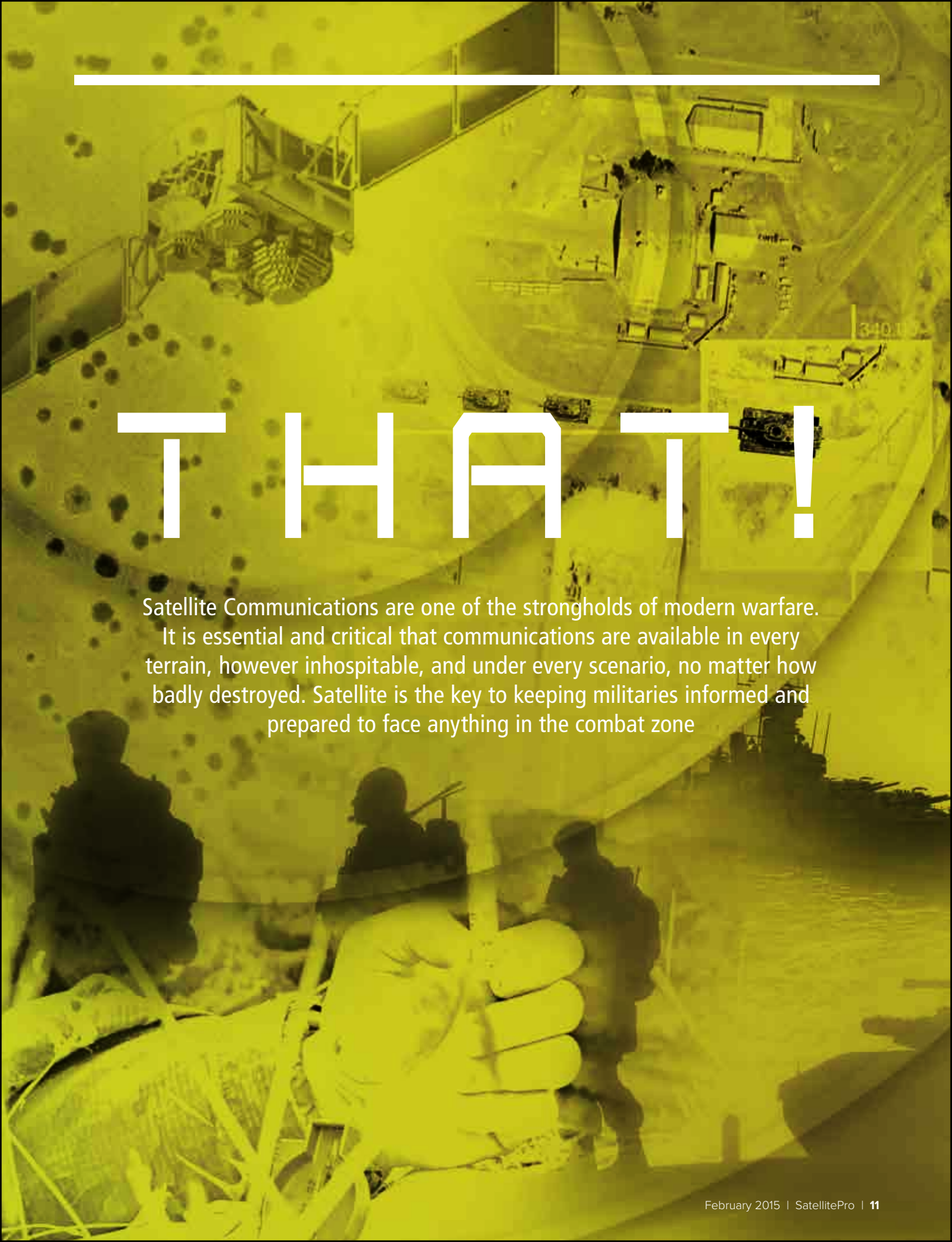

THAT!

Satellite Communications are one of the strongholds of modern warfare. It is essential and critical that communications are available in every terrain, however inhospitable, and under every scenario, no matter how badly destroyed. Satellite is the key to keeping militaries informed and prepared to face anything in the combat zone

Military satellites typically operate in the UHF, X-band or Ka-band frequency bands. The most common missions for these satellites are intelligence gathering, navigation and military communications. There are approximately 1,100 active satellites in space, both government and private. It is not entirely possible to identify the exact number of military satellites from these, partly due to secrecy and partly due to some satellites serving dual purpose missions such as GPS satellites that operate for both civilian and military purposes.

An army communication jeep used as a command centre.

The military sector was the first to use satellite communications and there will always be a need for the technology within the sector, even in the event that satellite becomes less needed elsewhere. This is due to the nature of the military's tasks and operations.

Koen Willems, Market Director, Government, Defense and Mobility Satcom at Newtec says: "Whenever troops are deployed, they are sent into areas where terrestrial communication is not always available in remote regions; is not secure due to the incumbent telecom operators or is destroyed. The first infrastructures to go down in times of conflict or after a disaster are the terrestrial communication lines. As such, satellite communications becomes the only alternative."

After the expensive and long interventions in Iraq and Afghanistan, world leaders are reluctant to send in "boots on the ground" to resolve the numerous conflicts. The types of intervention by coalition forces, Departments of Defence (DoDs) and international peacekeeping organisations have changed drastically over the last couple of years. The operations have become leaner, shorter in timeframe, in an international context and with fewer troops involved. A national defense organisation is not always sure where it will need to deploy an operation next and it has to be prepared for deployment anywhere in the world in the near future, according to Willems.

Hence, he says, satellite gives DoDs a lot of flexibility. "With the right choice of satellite constellation and ground satcom technology, DoDs can connect to theatres, operations or assets on land, air and sea anywhere in the world. Moreover, when a quick reaction is required, it can quickly deploy the required units to the crisis area and provide the necessary support services."

Henrik Norrelykke, VP, Land and Mobile, Cobham SATCOM adds: "Satellite has always played a vital role as far as beyond-line-of-sight communications goes. Satellite has differentiated itself from other means of communications especially in its inherent support of IP data in conjunction with voice communications."

With that in mind, encryption is certainly key for military operations. However, Jean Claude Veillon, VP Telecom Solutions Marketing for Thales Alenia Space says that simply to protect information is not the only requirement that needs to be taken into account. The security of an information system is achieved by the combination of several techniques.

"INFOSEC is addressed through the encryption of information meant to protect data, transform red data into black, before accessing the modem at the application level; COMSEC is achieved by encrypting the communication channel, modem to modem at the IP level; and TRANSEC is achieved by encrypting the transmission layer, from modem to modem at radio level.

"On top of such network safekeeping requirements and in order to fully complement the protection of information sharing between the vital functions of a MILSATCOM system, it is absolutely mandatory to protect under a cyber-aspect, the satellite at the level of the mission and the networks control centre by securing its access against any attempt of intrusion or any other kind of cyber-attack," explains Veillon.

"The first infrastructures to go down in times of conflict or after a disaster are the terrestrial communication lines. As such, satellite communications becomes the only alternative"

KOEN WILLEMS, Market Director, Government, Defense and Mobility Satcom at Newtec

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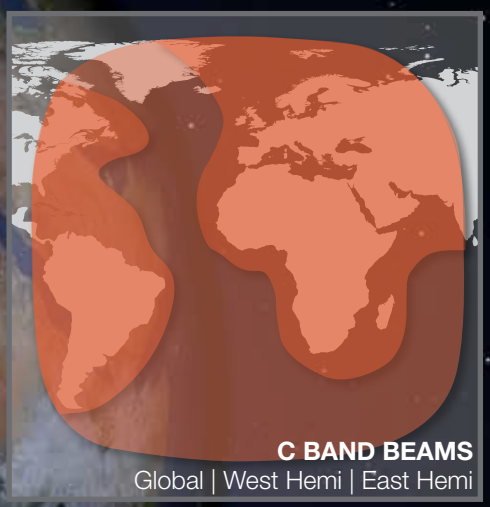

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Satellite rendition courtesy of the Boeing Company

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Veillon iterates that whatever the situation, the link between two MILSATCOM users is mandatory. This explains why the above mentioned techniques are required for MILSATCOM and GOVSATCOM systems especially for anti-jamming on-board antennas and modems on the ground. This is generally called the 'protected core' of the MILSATCOM system.

The encryption and VPN tunneling of the information can already happen before it is exchanged over satellite. The satellite communication pipe itself will be secured by the encryption of the baseband frames or by spreading the satellite signal.

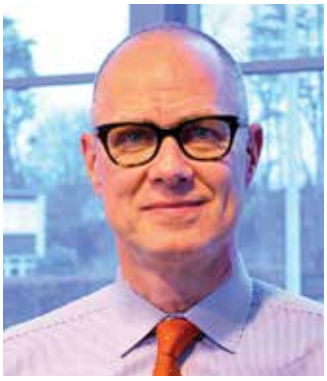
Willems says that using dedicated military satellite frequencies and satellite constellations will add to protection of information that needs to be secured. Typical technologies that are used for these military applications are AES encryption and TRANSEC technologies that are built inside the satellite modems or used as an external device.

Next to the security aspect, there are other factors that make communications and data transfers in the military sector different. Firstly, there are multiple applications like logistics, administration and tactical. Then there are services like Internet access, e-mail, video conferencing and surveillance. Lastly there are traffic types like video, voice and data that need to be addressed in a satellite network for a single operation.

"The importance of Intelligence, Security and Recognition applications (ISR) within military operations has increased substantially. The ISR platforms including UAVs, planes, land and sea assets, typically use bandwidth-hungry sensor technology. The large amount of collected data and video needs to be relayed from the ISR platform back to the strategic headquarters. Finally, the service availability plays a major role in the satellite network. Mission critical data needs to be communicated even in harsh fading circumstances like rain, dust and shadowing effects in order not to endanger the operations at hand or cause the wrong decision to be made.

"In all these scenarios there is no room any longer for traditional VSAT systems. The VSAT platform today needs to be multi-purpose, multi-service and allow global connectivity. Multiple services and applications should run over the same infrastructure to the different operations around the world. Moreover the network needs to support a variety of video, data and voice traffic from a few kilobits to a tenfold of megabits in an efficient way; both from the hub to the terminals in the theatre and vice versa. Depending on the type of traffic different return waveforms can be addressed," says Willems.

With shrinking military budgets things are quickly changing according to Norrelykke. "Over the past decade the military sector has gone from almost exclusively using proprietary satellite network technology to largely taking advantage of available Commercial-Of-The-Shelf (COTS) equipment and networks used in addition to military only networks. It has also stimulated the build-up of advanced commercial networks designed to effectively serve military applications."



"Satellite has differentiated itself from other means of communications especially in its inherent support of IP data in conjunction with voice communications"

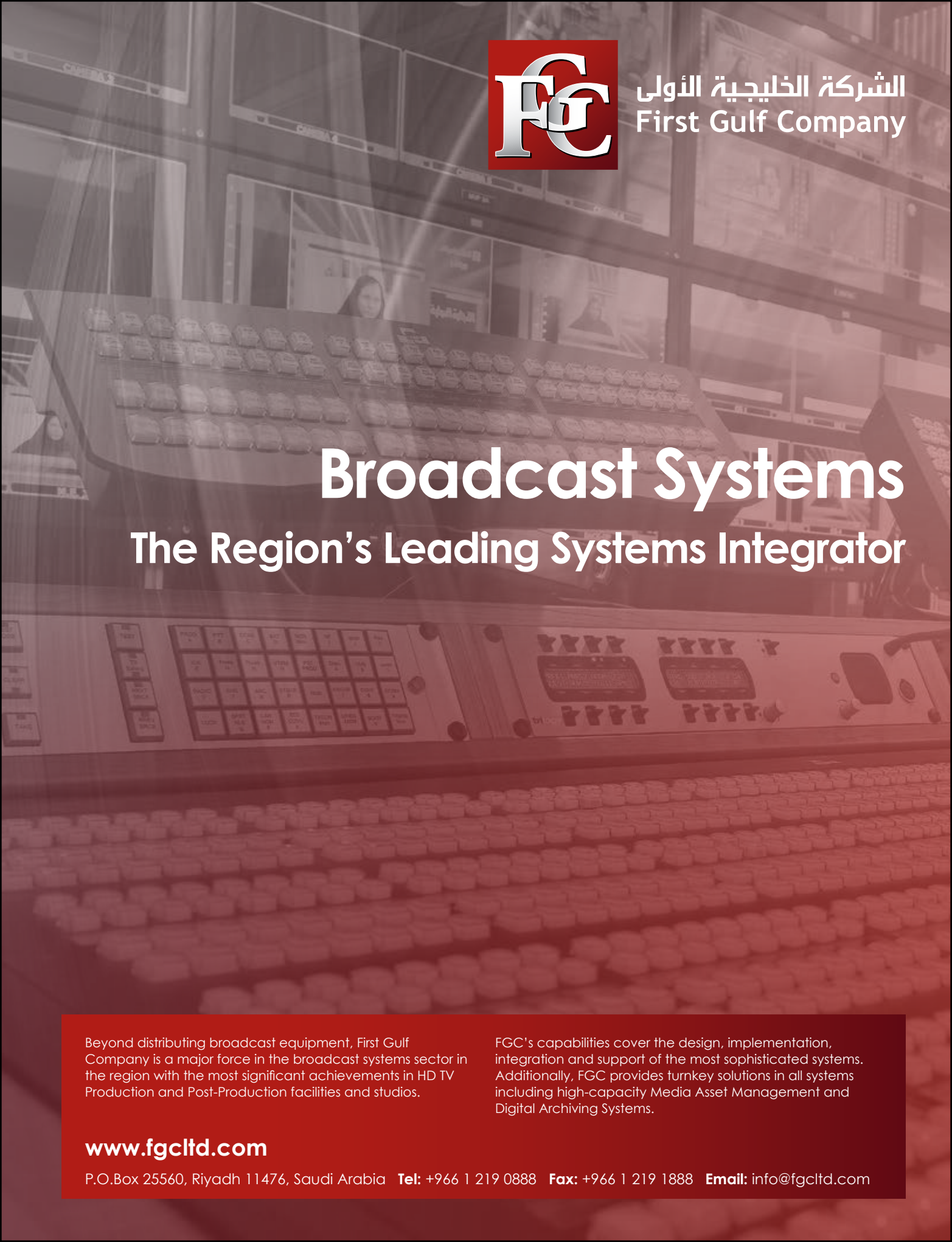
HENRIK NORRELYKKE, VP, Land and Mobile, Cobham SATCOM

Growing data, voice and video communications also result in the need for additional satellite bandwidth. HTS might be the best solution yet. Military command could usually use HTS solutions in a complementary capacity compared to the one provided by the protected core MILSATCOM, to serve welfare and non-strategic military applications. Veillon explains that when it comes to questioning the validity of multi-spots solutions when planning a deployment scheme, a multi-spot offer will have to take into account generic military requirement such as flexibility in terms of capacity, the space resources available on the multi-spot coverage need to be flexible to deliver capacity when and where needed. At a system level, the link between the end user and military gateways is also an important consideration of the system design phase. Next protection is important. When planning the availability of space resources, a possible jamming strike needs to be taken into account.

HTS multi-port solutions will therefore have to either implement flexibility and protection/resilience functions, or be merely retained as a complementary resource alternatively to the protected and resilient MILSATCOM Core.

Willem says: "The launch of new commercial (EPIC, Global Xpress) and military (WGS) High Throughput Satellite constellations will certainly help DoDs around the world to solve some of difficulties they face concerning growing data requirements and global connectivity. The price of the megabits will also come down which is good news for military budgets. When satellite operators and ground segment satcom technology providers work closely together they can squeeze maximum efficiency out of the HTS satellite links that will allow military network operators to transport more data in the same satellite bandwidth at maximum service availability.

"Although HTS has many upsides there are some considerations that need to be taken into account for military networks. The ground infrastructure will become more complex with different gateways to manage the multiple spot beams, resulting in increased CAPEX costs. The service availability can also cause trouble, especially in Ka-band spot beams, if the right technology is not selected to counter deep fading situations. When operations move across different satellite spot beams like



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COTM, technology needs to be put in place to allow easy roaming and beam switching. That is why many defence organisations will not put all their eggs in the same HTS basket. Depending on the application, the service and the region, DoDs will still have a choice between commercial and military constellations, and between HTS and traditional satellites in X-, Ku- and C-band," continues Willem.

On the other hand Communications on the move (COTM) has nowadays clearly become more than a trend in the MILSATCOM market, this is now a fact, and as such a common operational requirement.

Veillon explains that an on-the-move application is mandatory to allow operational units to be permanently connected to the operational backbone. This means that SATCOM solutions need to be proposed, and then used, at a tactical level for the Army, Navy, Air forces and Special Forces.

"Impacts on the mission (payload) and on the various SATCOM assets are significant. The size of the antennas used on the ground segment will have an impact on the mission performances itself. The integration of the Satcom terminal on vehicles as aircrafts are also not so easy; so at a system level, when implementing multi-spots system, the handover between two spots need to be well managed in order to maintain a satisfactory operational connection. Thales Alenia Space and Thales Secure Communications and Information Systems are working together to propose and deliver such OTM solutions," says Veillon.

Norrelykke of Cobham SATCOM adds that increased demand for real time situational awareness has been met by adding real time communications capabilities to command and control vehicles. He says: "Deployment has been somewhat limited by the almost linear relationship between throughput and size of COTM satellite terminals. Compact terminals – typically Inmarsat BGAN terminals – provides limited throughputs while – Ku/Ka terminals providing higher throughputs are significantly larger limiting the practical use of these systems."

Navies use COTM in order to communicate at sea.

Willem thinks on-the-move platforms will be used as tools to increase the situational awareness or to collect intelligence through on-board sensors and video cameras. In such a scenario the return path from the on-the-move platform to the hub over satellite becomes data intensive. This has consequences for the satcom terminals on board the on-the-move platforms. They need to transmit more data but still fit within the size, weight and power constraints of the platform. For instance, if you make the antenna on board a UAV too large and too heavy, it will impact the reach and reduce the operational time of the aircraft.

"Again, the service availability in COTM applications is important to exchange mission critical information, which makes it an even more difficult exercise. Certainly when you consider antenna technology and fading effects in the higher satellite frequency ranges. The right technology building blocks and equipment need to be combined to make sure the on-the-move solution is up to the task and increases the operational efficiency of warfighters during their missions," explains Willem.

He also addresses the increased dependence of maritime forces on satellite communications when they are out at sea. "Not only do the military vessels collect ISR data or report on situational awareness over satellite, they also need satcom for onboard welfare service, logistics, administration and e-health. It becomes increasingly difficult to enroll young people into naval missions and spend months at sea without access to Internet or other communication tools. Moreover, military unions enforce DoDs to provide a minimum of welfare and healthcare lifelines over satellite. This is not an easy task for naval satcom services due to the fact that satellite coverage over oceans and seas is not available or scarce. This will hopefully be solved with the upcoming launch of the upcoming new satellite broadband constellations," concludes Willem. PRO

"It is absolutely mandatory to protect under a cyber-aspect, the satellite at the level of the mission and the networks control centre by securing its access against any attempt of intrusion or any other kind of cyber-attack"

JEAN CLAUDE VEILLON, VP Telecom Solutions Marketing for Thales Alenia Space

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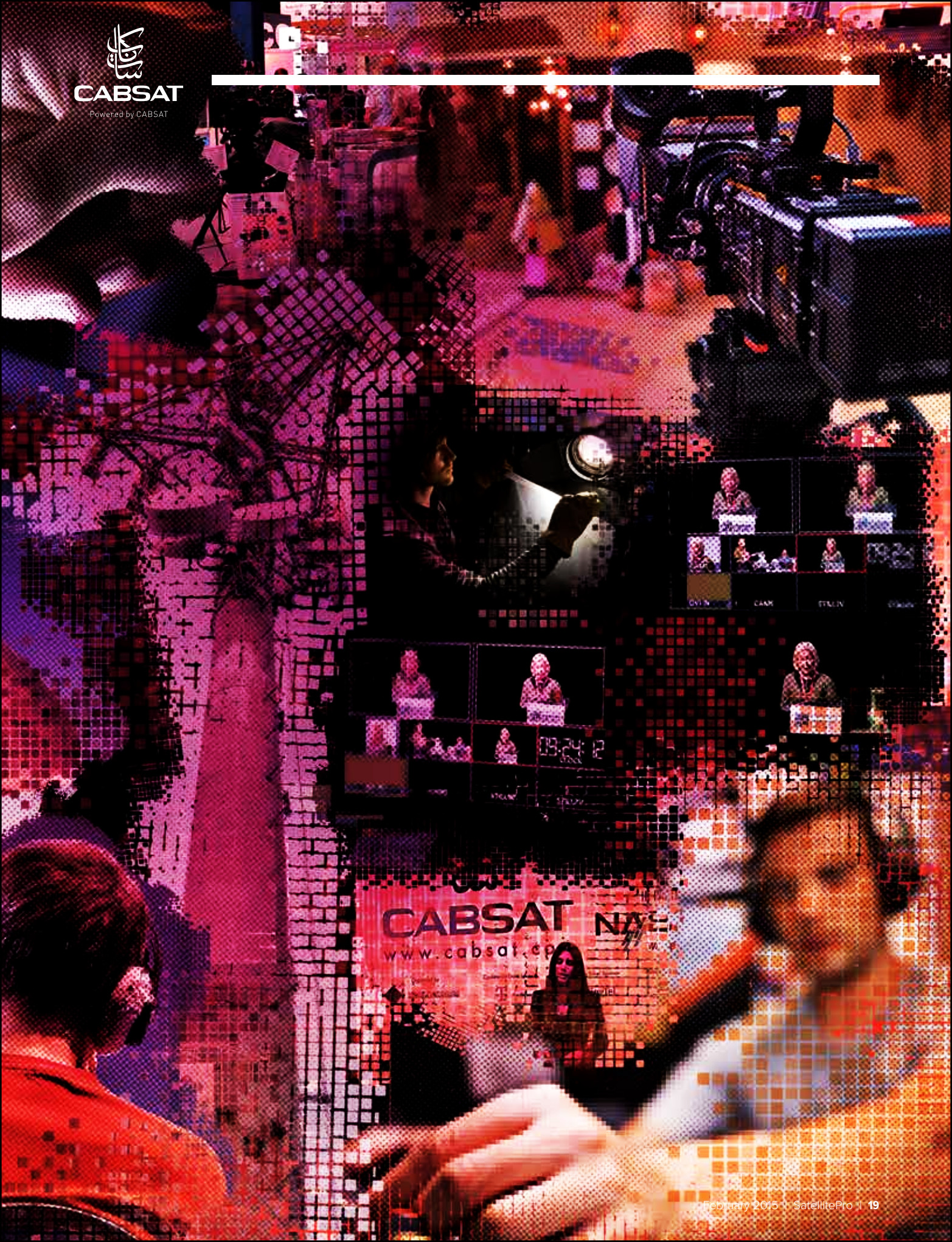
Looking forward to CABSAT

This year CABSAT will take place from March 10-12 2015, and is expected to draw more than 900 exhibitors from 60 countries. It has established itself as being a strategic must-visit show for everyone in the broadcast, production, content delivery, digital media and satellite sectors across the Middle East, Africa and South Asia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With the Middle East and North Africa (MENA) media market expected to grow from US$16 billion in 2014 to US$24 billion in 2019 according to Strategy & Analysis of CABSAT will examine the global impact of industry-evolving mega trends and highlight how regional companies can adopt products and strategies to drive monetisation and growth opportunities.

This year's show will examine how global media and entertainment organisations are driving innovation into their businesses and content offerings amid the convergence of international broadcast, film, production, internet, telecom and consumer electronics sectors in the industry.

The show which runs from 10-12 March at Dubai World Trade Centre (DWTC), will present three days of disruptive trends delivering transformational change to the region via an exciting roster of new and enhanced features.

Andrew Pert, Show Director of CABSAT said that there were quite a few new companies that are coming to the show this year. "On the satellite side, I am pleased to mention that we have KT Sat, Korea's leading satellite player. Then, there's ITC Global, which has a huge presence in North America and is now looking to enter this market. EMC and BHS Telecom also entering this market for the first time. BHS Telecom is a reseller of bandwidth over Africa from Dubai. Inmarsat too is returning to the show after two years."

The GVF MENASAT summit is one of the highlights at CABSAT. It has been an embedded, key, added-value, feature of the annual CABSAT exhibition for many years, and 2015 will continue the complementary relationship between exhibition and summit programme at CABSAT.

Following on from the most recent success of the GVF MENASAT Summit series, in 2014, GVF and CABSAT have proudly announced a dedicated satellite hub summit as a part of the CABSAT conference. In fact, 2015 brings expanded value from the event with a brand new format, and new and innovative content, as the GVF Satellite Hub Summit at CABSAT.

Pert said: "The GVF Summit used to be a dedicated two and a half day invite-only, closed door conference. We've actually combined this now with our Satellite Hub conference feature, so it's a three day free to attend conference programme this year covering all the challenges, latest trends and technologies that are influencing satellite companies. EMC-Corp are the main partner for the conference this year."

The GVF Satellite Hub Summit will focus on satellite and satellite communications, challenges and solutions, and will deliver more specific content to support the region's satellite providers and attract more regional telco's to participate in CABSAT – encouraging more partnerships between them, and the region's content creators, managers and distribution platforms.

The event will take place physically within the CABSAT exhibition, using a dedicated, purpose built, centrally located and high-profile meetings facility. Not only will this bring the GVF Satellite Hub Summit closer to the exhibition space and to CABSAT's thousands of visitors, but will offer participating organisations a higher level of visibility for their support for the event programme, and for the vitally important dialogues and opportunities for networking that the programme facilitates and promotes.

The GVF Satellite Hub Summit programme will feature a range of key themes and topics, many of which are new to the GVF CABSAT programme this year, and which have been included because they are at the very core of the current global satellite communications solutions discussion arena. Topics include:

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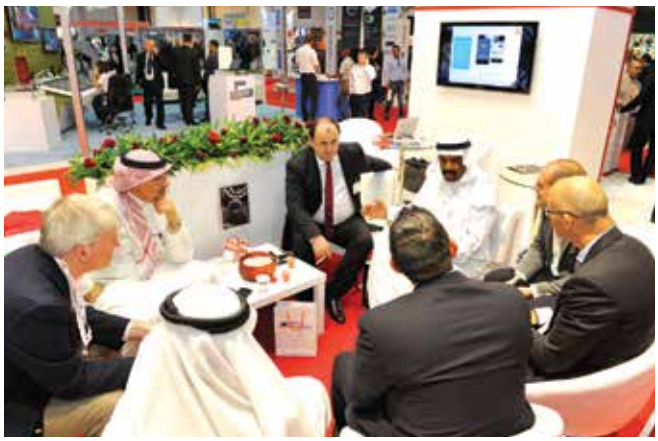

marketplace? What are the key analytics that provide a clear picture of the demand and supply interface? What data is essential for a comprehensive understanding of the growth areas of the regional market? How should such data be interpreted to facilitate accurate and reliable forecasting, providing a foundation on which business decisions by service providers and vendors may be made? These are just some of the questions to be posed in this opening session.

Another important topic will be *Satellite Spectrum: Potential Implications of the 2015 ITU World Radiocommunication Conference* Radio frequencies that are the very core of the global satellite industry's ability to deliver services are under threat. The Satellite Spectrum Initiative (SSI) was formed by stakeholders in the satellite industry that recognise the serious threats and challenges that satellite spectrum currently faces all over the world, particularly in C-band. Recent increases in the amount of spectrum allocated to terrestrial services, in particular mobile services, have often come at the expense of spectrum for satellite services. The loss of spectrum is now reaching a critical phase as the impact will soon affect current satellite services and leave no available spectrum for innovative services. Such wireless-industry efforts, if successful, would lead to a significant loss in revenue for the satellite industry and constitute a severe blow to user communities. This global effort is being supported not only by the satellite industry, but in tandem with a broad array of partners and allies within the user community. In building an effective coalition prior to the next World Radiocommunication Conference (WRC-15), the SSI campaign is focusing on building strategic alliances with new and current constituencies for the initiative.

Cyber Security is also a key area of discussion on the agenda, and that topic will discuss how the satellite Industry is addressing the challenge.

Network resilience and robustness are an imperative as Cloud-based networks of applications, data, and services become an increasingly attractive target for financially and politically motivated cyber-criminals

Next comes High Throughput Satellites, with new markets, new services and new technologies in key verticals like Next-Generation satellite backhaul for emerging LTE and small cell deployments, maritime, aeronautical, oil, gas and mining as well as government usage.

Further topics include Satellite News Gathering; developments in Communications on the Move and Communications on the Pause; the cloud and the marriage of mobility and Web 2.0; the Internet of things and M2M; Satellite for humanitarian assistance and disaster response; proactivity and reactivity to ensure interference-free satellite services and the the viability of FTTP and FTTH. PRO

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Lieutenant Colonel Matthew Turpin, Chief of Asia-Pacific Strategy, **Department of Defense**

CONFERENCE SPEAKERS INCLUDE:

Nicolas D Ojeda Jr, Deputy Executive Director , **Information and Communications Technology Office (ICT Office)**

D D'Ambrosio, EVP, Government Services, **O3b Networks**

Airbus Defence & Space Speaker to be announced

Lieutenant Commander Bill Blick, Joint Commander Engineer, **New Zealand Defence Force**

Tom van der Heyden, CEO, **Eur Asian Technology Holdings**

Matthew Child, SVP Government Services, **Eutelsat**

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KEY TOPICS TO BE DISCUSSED:

- Regional military SatCom roadmaps and packages
- Technological advancement in SatCom capability
- Military SatCom requirements and capability
- US Pivot to Pacific and the consequences for MilSatCom
- Commerical SatCom developments and implications for the military
- Picosatellites and maritime security

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The boom of

A decade ago, broadcast commentators and vendors started using the mantra that consumers wanted "to watch the content they choose, when they want it, where they want it, and on the device they want it". Today that concept – now generally referred to as "TV everywhere" – is a practical reality.

According to research carried out for Adobe, in the USA consumers watched 38.2 billion videos online in Q2 2014, up 43% over the same number in 2013. Monthly unique views for online TV were up 388%, again year on year.

The Pew Research Centre found that 78% of adults in the USA with online access watched videos. The big driver for this is the smartphone: 40% of smartphone users regularly watched video on their devices. As we saw with the launch of the iPhone 6, with more than 10 million devices sold in the first weekend of availability, there is no slowing in the enthusiasm for smartphones.

Speaking at CABSAT 2014, Vidya Subramanian Nath, Research Director at Frost and Sullivan said: "With 76% high-

With the unprecedented growth of TV Everywhere, broadcasters must adapt to provide an immersive experience to viewers. This means a renewed focus on better connectivity and improved online services

speed broadband penetration, 77% TV connectivity and over 100% mobile device penetration, the region is on the threshold of this phenomenon."

She pointed out that the region will have 390 million internet users, and six or seven connected devices for every household, by 2020.

Nath's view is that, while linear free-to-air and pay TV services will continue to dominate in the region, there is growing evidence that consumers will want to watch content on video-capable internet devices.

According to Cisco's research, there will be 25 billion devices connected to the internet next year – that is more than three devices for every man, woman and child on the planet. And the figure will double again, to 50 billion, by 2020.

Newer technologies like LTE (so-called 4G) cellular connectivity and 802.11ac Wi-Fi mean that bandwidth constraints have all but disappeared. If you want to watch video on your phone, tablet or laptop, you can.

Broadcasters have been forced to face this reality. Their audiences expect to see their favourite shows when and where it is convenient for them, not the broadcaster.

"TV everywhere has been developed as a collective strategy by both pay-TV operators and TV content owners to enhance the traditional linear TV proposition," according to Erik Brannon of global research organisation HIS.

"TV everywhere has been developed as a collective strategy by both pay TV operators and TV content owners to enhance the traditional linear TV proposition"
ERIK BRANNON, HIS

"In spite of the differences in strategy, all TV everywhere products have one thing in common: they allow for current pay TV video subscribers to authenticate and consume on secondary screens a significant amount of content that they purchase as part of their normal pay TV video subscriptions."

The challenge faces free-to-air broadcasters as well as subscription services. Indeed, the most successful multi-platform video on demand and live streaming service in the world is the BBC iPlayer. It has a reach of more than 10.2 million online views a month (BBC iStats, January 2014) in the UK alone, a country with a population of less than 60 million.

10% of those using the iPlayer were watching live television; the vast majority were using their online device to catch up. Viewers were choosing when as well as where to watch.

There is also a new breed of service providers, which exists solely to fulfil the TV everywhere demand. Netflix is one

such entity, which now creates its own content – such as two series of House of Cards – as well as offers existing movies and programming. It has around 50 million subscribers worldwide, so it is best described as a relatively small player that is a growing threat to traditional players.

Looking at over-the-top pay services in general, researchers Frost & Sullivan predicted a compound annual growth of 60% or more over the next three years, in the Middle East.

So consumers now have a huge choice of what they can watch and when. For the broadcaster, having to stay in this market, it is a business and technical challenge. The business challenge lies in raising revenues from audiences who have learnt that "the internet is free", while demanding ever-more sophisticated services that can be expensive to generate.

Broadcast television is simple in that there are really only two output formats: SD and HD. But TV everywhere means serving a multitude of devices: smartphones, tablets, games consoles, smart televisions, browsers and more. Each of these devices has its own unique combination of screen resolution, audio capabilities, codec, wrapper and streaming format. To be truly compatible, broadcasters and service providers have to create custom-made packages for each device, separately.

"Creating a cohesive collaborative set-up that can unify content workflows for linear broadcast television alongside multiscreen distribution will be a priority for broadcasters, studios and pay TV providers"

VIDYA S NATH, Research Director, Frost & Sullivan

Even security is now an issue. Previously it seemed that online services were converging on PlayReady, the DRM element of Microsoft Silverlight. Recently, though, Google has announced that it will no longer support Silverlight on Chrome, its browser which now has more than 20% of the market. So service providers have to cater to at least two forms of intellectual property protection.

At first the tendency was to create all the different formats as part of the signal processing factory and store them all on servers ready to go to the content delivery network as requested. As processing power has fallen in price, increasingly the trend is to store the content once and create the package on the fly, at the point of demand.

Whichever route is chosen, it is clear that the complexities of creating all these different formats have to be automated, and made part of a new kind of broadcast infrastructure. There will be less reliance on the bespoke hardware that broadcasters have traditionally used, with virtually all tasks being implemented in software running on flexible processing farms.

Not just the workflows but the allocation of resources will be automated.

This concept – the software-defined network – exists in other IT applications, and it will become increasingly common in broadcasting. Without it, the challenges of serving the growing demand for TV everywhere will swamp the broadcast business.

In her presentation, Nath analysed the growing need for collaboration between traditional and new media, stating: "A typical TV everywhere ecosystem includes at least 15 different components, spanning ingest to management, delivery, monitoring and playback of content.

"Most vendors providing these solutions are multinational companies," she explained.

"Creating a cohesive collaborative set-up that can unify content workflows for linear broadcast television alongside multiscreen distribution will be a priority for broadcasters, studios and pay TV providers.

"The demographics of the market and the cultural make-up contribute significantly to the demand for TV everywhere. Home entertainment and social networking play an important role in people's lives. All these factors contribute to the demand for more and more content in local languages as well as international media.

"Clearly this is set to be a big growth market for the creative and technology players in the MENA region." PRO

This CABSAT whitepaper has been authored by Dick Hobbs, journalist, Broadcast Technology.

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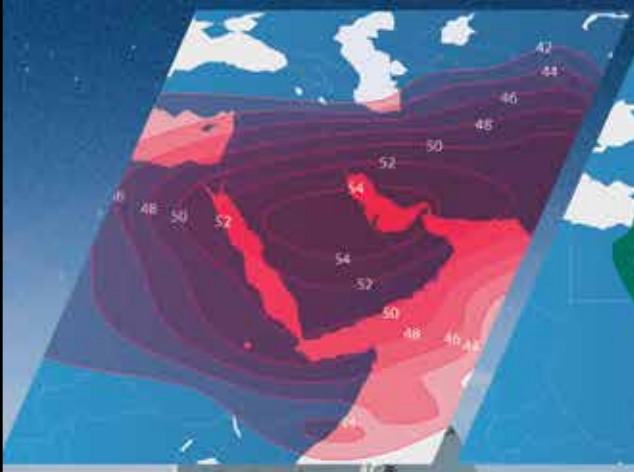

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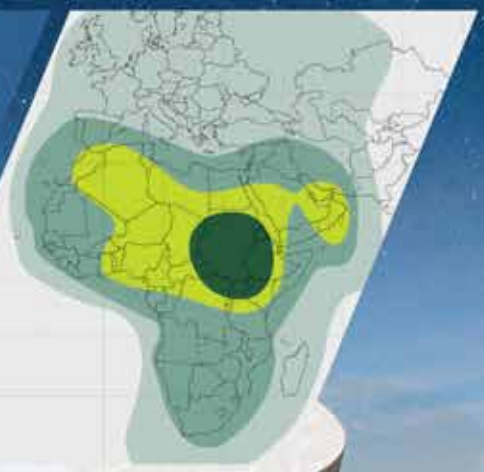

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PREVIEW

Newtec to debut **Dialog at CABSAT**

Delegates stopping by Newtec's CABSAT 2015 booth will hear how satellite operators, providers and broadcasters can choose their technology without worrying about the constant evolution that marks the satellite market. This year marks Newtec's 30th birthday and it is reaching that milestone with Newtec Dialog, a multiservice platform equipped with brand new patented technology, the realisation of a new DVB transmission standard and strong financial growth of 20% in 2014.

Newtec Dialog, which embraces flexibility, efficiency and scalability, allows operators to build and adapt their business as the market changes by enabling multiple services over a single all IP-based platform. It runs using an optimal modulation and bandwidth allocation. Key innovations to increase that efficiency will be showcased at CABSAT 2015. New patented return link technology, Mx-DMA including HighResCoding (HRC), for example, results in MF-TDMA flexibility and on-demand variable bandwidth allocation at SCPC efficiencies.

Visitors will also discover Newtec's modem portfolio for low and high speed applications. Within this portfolio the newly released

MDM6100 Broadcast Satellite Modem which supports the DVB-S2 and DVB-S2X standards, as well as DVB-S and DVB-DSNG. The modem incorporates Newtec's own technologies in order to achieve barrier-breaking efficiency and as a modulator, is best suited for broadcast Direct-To-Home (DTH), primary distribution to head-ends and contribution of television and radio content.

All Newtec's products are fully upgradeable to the new standard DVB-S2X via a software upgrade; no hardware is required. The company will be demonstrating the efficiency gains that this new transmission standard achieves.

The booth will also showcase other solutions for any application for government and defence; cellular backhaul and trunking; consumer and enterprise VSAT; and mobility, offshore and maritime market. Various HTS systems and applications which result in new/optimised business models to deliver HTS services to the end-users will also be available, along with cellular backhaul.

ETL to showcase **RF over Fibre**

CABSAT visitors stopping by the ETL stand will be able to view the company's full range of RF over Fibre products which have already been received well with a major broadcaster and telecommunications service provider placing significant orders.

StingRay builds on existing RF expertise, has superior RF specs and provides a design for high isolation applications. The compact unit, which incorporates single mode fibre links, enables remote control and monitoring of temperature, fan status and power supply status via web browser interface and SNMP.

ETL's 128x128 compact Vulcan matrix, a compact matrix with RF performance, will also be on display at CABSAT. This compact configuration has also seen support in the region from a major broadcaster. It provides a high density solution for larger RF routing systems and is typically used for distribution of multiple L-band signals in a broadcast environment, through large satellite teleports with a high volume of Satcoms traffic. It is housed in a 16U 19" rack enclosure and has extensive on-board monitoring and reporting of RF card amplifier status, CPU and PSU status and HMI communications.

Another product CABSAT visitors will be able to view is variable gain Alto amplifiers which have been supplied to Etisalat and

ND Satcom for the Al Jazeera Network solution provided by Media Group International. The Alto family of amplifiers includes 4, 8 and 16 module options as well as redundant configurations with variable gain. It can be remotely controlled and monitored via ethernet and web browser interface and also via the front panel display.

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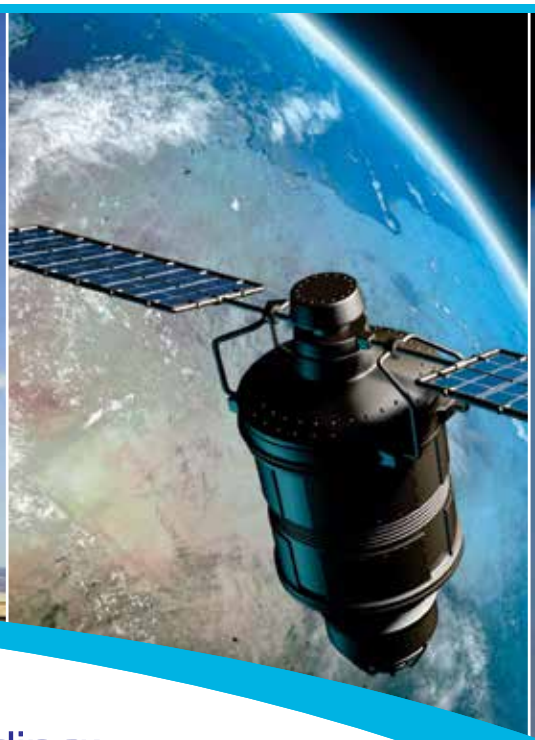

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PREVIEW

SkyStream to bring **COTM solutions to the show**

SkyStream is investing heavily in mobility and in its applications. During CABSAT SkyStream will showcase these solutions along with the flat Comms-on-the-move antennas of Thinkom.

ThinSat300 is a low profile and efficient antenna that provides the best solution for the ground mobile connectivity requirement. Depends on the application's requirement, ThinSat300 can support extremely high data rates in remote location connectivity with high efficiency and reliability.

During the past two years, SkyStream along with its strategic partners including Thinkom designed and successfully delivered solutions for Border controls, Surveillance, Military and VIPs. ThinSat300 was an

important element in the proposed solution. During the past period of operations, the antenna successfully delivered its expected performance in different environments and terrains.

Intelsat to discuss **Epic satellites at CABSAT**

At CABSAT this year, Intelsat will showcase the high performance, next-generation satellite platform Intelsat EpicNG, which will deliver throughput in the range of 25-60 Gbps per satellite. EpicNG can be deployed in C-, Ku- or Ka-band frequencies, enabling customers to choose the best spectrum that fits their applications and regional needs.

The capabilities provided by EpicNG will allow Intelsat to reduce congestion through such means as allocating bandwidth dynamically and allowing load sharing of links during times of high traffic loads. Our ability to deliver capacity through traditional wide beams as well as high-throughput spot beams on the EpicNG fleet will enable us to meet the emerging business demands by providing advantages such as smaller equipment that allows for the rollout of solar-powered sites. The mix of capacity also gives media organisations more flexibility in network design and throughput options. In addition, the customisation of channel content will be made easy and 4K needs will be also addressed, by allowing for cost-efficient, high throughput transmission.

The platform, which includes seven announced satellites to date, is fully integrated with Intelsat's existing fleet. Intelsat 29e, expected to launch in the second half of 2015, will provide capacity for the Americas, while Intelsat 33e, scheduled for launch in 2016, will provide HTS capacity for the Middle East and Africa. EpicNG is an important part of Intelsat's plans for the Middle East, as it will enable all customers to address the growing demand for bandwidth and ensure unprecedented coverage, even in the most remote areas.

Norsat will promote **Ranger and ATOM series**

At CABSAT, Norsat will be showcasing its latest product innovations, the ATOM Series of block upconverters (BUC) and solid state power amplifiers which are small, lightweight and extremely powerful. Their small size and robust performance, as well as their ability to be easily integrated into a variety of systems, make them ideal for portable applications such as broadcast, airborne, and comms on the move. The ATOM series is flexible and can be configured and customised to meet varying application requirements.

Norsat will also be highlighting the Ranger, a high performance ruggedised satellite terminal ideal for rapid deployments where portability is essential. The Ranger is available in 45cm and 60cm antenna sizes. The company offers an extensive line of MIL-SPEC portable satcom terminals with aperture sizes between 45cm - 2.4 metres. Norsat's assisted acquire fly-away terminals have been field tested and proven to withstand the challenging conditions of military, broadcast and resource sector applications.

The MENA region is an important market for Norsat as it is a steadily growing market for the company. CABSAT provides Norsat with the opportunity to meet customers, resellers and introduce new products into this market. Norsat is also looking to strengthen its network within this region and welcome discussions from interested partners.

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PREVIEW

SIS LIVE to bring ManPakT terminals to CABSAT

SIS LIVE will be exhibiting at CABSAT this year and exhibiting the most recent developments to its satellite product portfolio. On display will be a selection of SIS LIVE's satellite uplink units, which will include a variety of portable and vehicle mounted terminals.

Products displayed will include the ManPak60; a portable yet powerful 0.6m terminal with no loose parts which has garnered significant interest at previous CABSAT shows. SIS LIVE's innovative ManPakT leads the way in the next generation of VSAT terminals. These tripod systems feature simple manual or fully automated satellite acquisition; an award winning GUI; and a range of optional extras including an integrated COFDM receiver for mobile camera connectivity, a Wi-Fi router enabling a secure satellite internet network and integrated housing and connections for encryption devices.

The latest addition to the ManPakT range of VSAT terminals for the first time in the region, the brand new ManPak60T. SIS LIVE has recently launched a 0.6m option to compliment the 0.75m, 1.0m and 1.2m. SIS LIVE's lightweight, fully automated, highly portable roof mount and flyaway antenna, uPod, will also be at the show.

Santlander Teleports to promote its services at CABSAT

Santlander Teleports will be showcasing a complete range of teleport services as well as managed satellite services from its ground facilities is Spain.

Its services include uplink, downlink and turnaround in C, Ku, Ka and X bands; Equipment co-location; Antenna hosting; Connectivity to major PoPs and end customer sites; Internet Access; Managed VSAT services; Disaster recovery and turnkey solutions.

Santander Teleport's highly qualified staff have experience in engineering projects, providing the flexibility to offer turnkey solutions, beyond standard requirements, to cover the needs and expectations of its customers.

David Andres, Business Development Manager at Santlander Teleports said: "We are looking forward to engaging with our valued customers and partners in this year CABSAT event and show them how we can promote their business together through our technology know-how, our highly proficient engineering staff and our best-in-class, highly secure and reliable services."

Hiltron to introduce HANT-C-Ku satcom antenna

Hiltron Communications has chosen CABSAT 2015 for the Middle East and Africa market introduction of two major additions to its product range. The HANT-C-Ku dual-band 3.7 metre satellite downlink antenna and HMFC motorised feed-change mount will both be promoted.

The HANT C-Ku antenna is used for professional satellite signal monitoring or receive-only services. A closely integrated feed system enables the HANT C-Ku to receive simultaneously the two linear polarised Ku band signals and the circular or linear polarised signals in C band. With a motorised polariser, the feed can be switched in C band between linear and circular polarisation. These sources can be converted to six independent L-band outputs.

The HANT C-Ku has a very wide range of applications including satellite performance assessment, digital newsgathering and cable-network head-ends. It provides reliable and accurate positioning far beyond the stability of commercial grade actuator devices. The very high rigidity of the HANT C-Ku's construction ensures absolute minimum backlash. It can operate in winds of up to 125km per hour and survive storm conditions of up to 200km per hour.

HMFC motorised feed-change antenna mount. The HMFC allows easy positioning of repositioning of waveguide horns on a motorised tray table. It can be used for antennas of various types and sizes. Two waveguide horns of different sizes can be attached, allowing signals from satellites operating in two different frequency bands to be received electrically selectable via a single antenna. Movement of the table is controlled via the Hiltron's HACU antenna control software. The waveguide horn for a desired frequency band can be aligned into the focal point of the reflector within 20 seconds.

PREVIEW

APSTAR to promote **new satellite at CABSAT**

APSTAR is looking to increase its presence in the Middle East, as well as support its current customers in the region. CABSAT will be the perfect show to promote APSTAR to the region.

The company has got satellites over the Middle East and North Africa. APSTAR-7 is at 76.5-degrees, which has got wide coverage over the Middle East and also from North Africa to Central Asia and from Afghanistan to Europe.

This year APSTAR will be showcasing different services to its customers including a wide range of applications including video distribution, Direct-To-Home TV, cellular backhaul, corporate network, maritime and aeronautical mobility services.

Thomas Antony, Sales Director at APSTAR said: "Our latest APSTAR-9 satellite is about to launch in Q4 this year, all tests and preparation is running smoothly. The APSTAR-9 Satellite is a DFH-4 platform provided by CASC (China Aerospace Science and Technology Corporation). APSTAR-9 will be located at 142E orbital slot to replace APSTAR-9A satellite. APSTAR-9 is equipped with 32 C-band and 14 Ku-band transponders."

Wiseband promotes satcom **integration**

At CABSAT Wiseband will be promoting its new solutions through integrating new technology from different providers. The company loves to come to CABSAT, as it has a chance to communicate with its large network of resellers and representatives. It aims to train them about the latest tech that Wiseband has developed and integrated through other technology partners and manufacturers.


Ahmed Hassan, CEO, Wiseband.

Wiseband has been at CABSAT for the past 10 years. Wiseband will also be demonstrating how to integrate satellite communications with advanced warfare and other solutions at the show.

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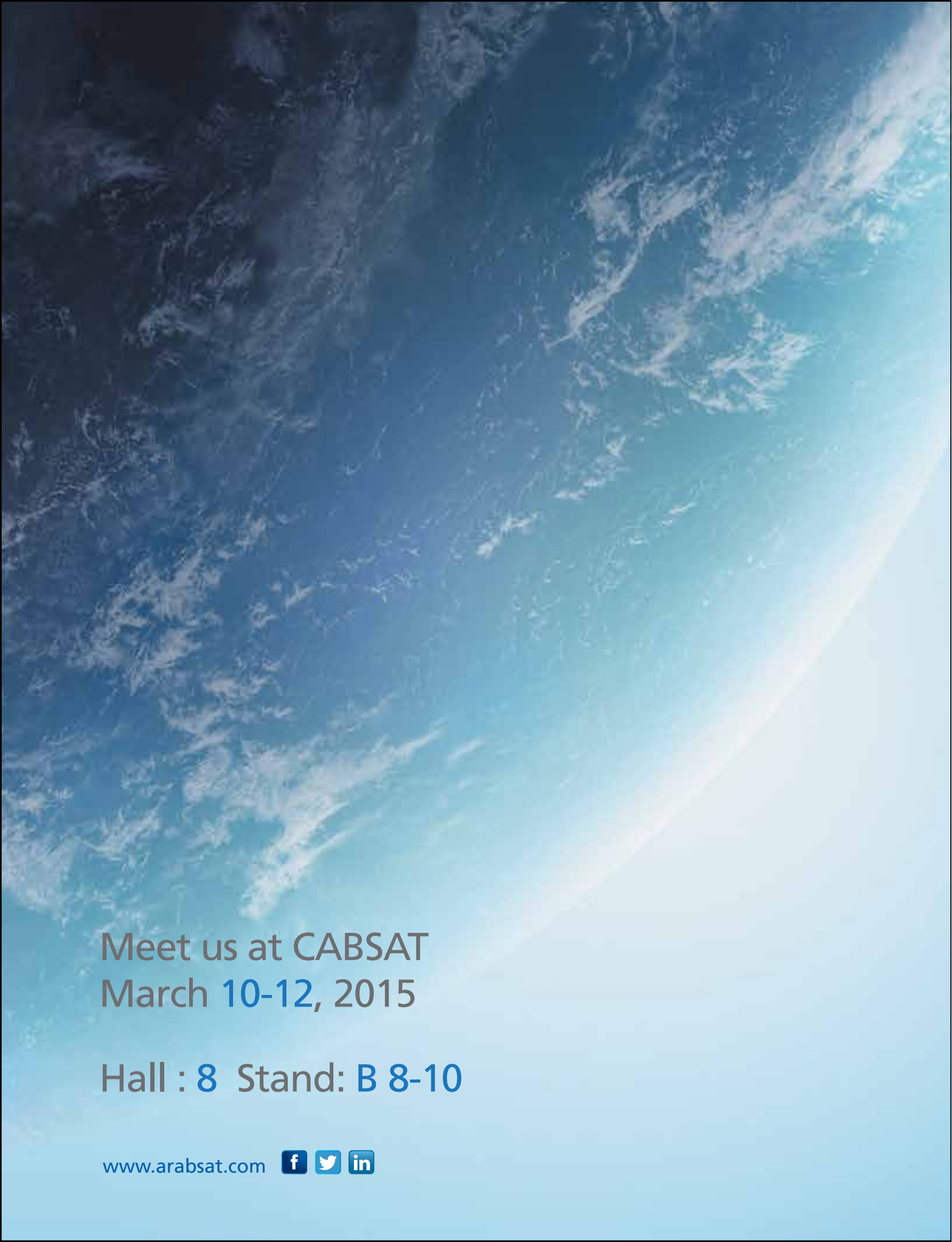
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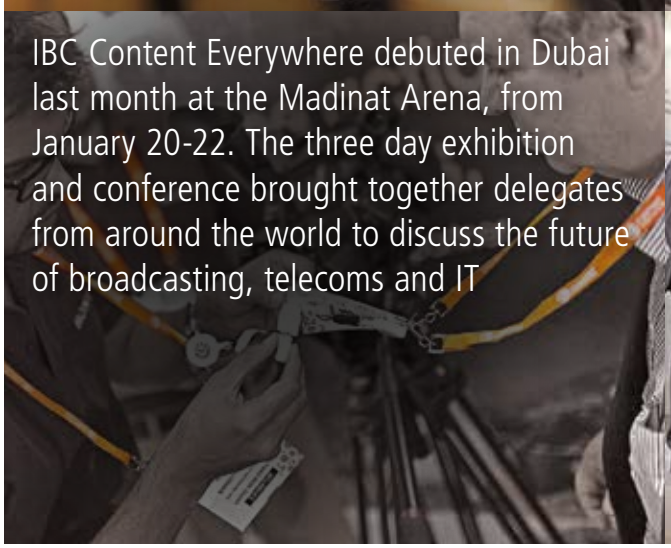
A Show to Remember

IBC Content Everywhere debuted in Dubai last month at the Madinat Arena, from January 20-22. The three day exhibition and conference brought together delegates from around the world to discuss the future of broadcasting, telecoms and IT



Etisalat launches **eLife over VSAT at the show**

Etisalat launched its 4G LTE and eLife services over VSAT technology, at the IBC Content Everywhere MENA event in Dubai.

Etisalat is the first operator to launch 4G LTE and triple play services (eLife) via VSAT in the Middle East region. It will allow customers in remote, desert and off shore areas to enjoy high-speed data and watch eLife channels over VSAT technology.

Commenting on the launch, Tareq Abdulla AlKharji, Senior Vice President Data Centres and Cloud Solution at Etisalat said: "VSAT technology provides a powerful and secure connectivity solution for companies that work in remote areas. Etisalat has more than two decades of experience in providing advanced solutions for a wide range of customers, from major oil companies to governmental entities. At the IBC Content Everywhere MENA, Etisalat takes great pleasure in announcing another first in the Middle East by launching 4G LTE and eLife services via the VSAT technology. It falls in line with our commitment to offer high speed broadband connectivity and entertainment experiences to our customers in remote areas, be it in the desert or the sea."

IBC Content Everywhere MENA is the second of the event series "IBC Content Everywhere" which was first launched in Europe by IBC, last September 2014, to reflect the very different nature of media connectivity in an IP world.

Argosy builds **brand presence at IBC**

Argosy is a company based out of the UK that supply installation equipment in the broadcast industry. It has a regional office in Dubai. Speaking about exhibiting at IBC Content Everywhere, Abdul Ghani, Sales Manager, Middle East at Argosy said: "Whenever we see an opportunity like this at IBC Content Everywhere, to market our products and network with potential clients, we love to be there.

"We are here to build brand awareness for Argosy. People who don't know what Argosy is, it gives them an example to learn of how we can provide a one stop shop for any of their installation needs," said Ghani.

Argosy has been doing business in the region for the past 15 years. It works with all system integrators the region like Sony, MGI and Tek Signals. It also has local partners in India, which mainly target African customers, in collaboration with the office in Dubai.

Deutsche Telekom **talks OTT**

Deutsche Telekom were present at IBC Content Everywhere to introduce customers to ways to develop their own OTT strategy, especially with satellite providers. By partnering with satellite providers, broadcasters and content producers to deliver services, Deutsche Telekom thinks it can provide a complementary service deliver services via OTT.

The company thinks its services can definitely help satellite services to complement their portfolio, and continue being the trusted partner to existent customers by delivering content regardless of platform.

Luis Del Valle Aleman, Global Business Development manager, Business Development and Innovation said: "We are very interested in development in this region, because we find that it is a quick growing and abundant market for content delivery services, so that's way we are pretty focused on working hard in this region.

"On one hand it's a fragmented region in terms of number of countries, but in terms of language it's quite unified. What we are trying to do is rely on our three main pillars in our portfolio, which are being a multi-CDN load balancing platform, that allows our customers to choose the right CDN partners to deliver their OTT content, and then load balance among them based on performance and other business rules that apply on top. Second is a platform developed from scratch that can be used by satellite operators. 'LiveStream Perform' is especially designed for linear content on TV. Thirdly we can provide a full end-to-end VOD platform. All of these are cloud based too," concluded Aleman.

Tata touts fibre **connectivity at IBC**

Tata Communications is a big player in the Middle East for the production of content, as well as for the transmission and enablement for the second screen for content. It was present at the exhibition to explore and work more with its customers, and to demonstrate its services and capabilities in the region.

Sameer Kanse, Head- Product and Business Strategy, Media Services, Tata Communications said: "This is a great exhibition and conference to participate in. We are already present in UAE, Qatar and South Africa. We are definitely looking to expand in the region, and to pretty soon be in Egypt, KSA and other key markets in this region. We have partnered with Etisalat for delivering our services and have several big content companies that are our customers."

Kanse explained that the company has a good capillary of fibre links in the region that go to most of the key hubs. It is also connected into media hotspots worldwide like cable operators, production studios and TV channels.

"We are also connected to teleport operators and if you wanted to transmit your traditional feeds on satellite, we could enable this. We can take you directly on fibre there. This has two advantages, it's definitely more economical, and partners don't want to take the same feed to other destinations like Hong Kong or the US. There would need to be an introduction of a different advertisement or time delay etc. over fibre this becomes easier because in effect it means one more channel. At the same time we work with satellite and this is complementary," continued Kanse. PRO

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Welcome to the Multiservice Era

by Hans Massart, Market Director, and Kerstin Roost, Public Relations Director at Newtec

As 2015 begins, so too continues the era of multiservice – with broadcasters and satellite service providers facing numerous challenges, including more complex workflows, the introduction of new services, increased user expectations for always-on connectivity and pressure on efficiency in both the space and ground segments. The importance of embracing the multiservice trend was emphasised by our recent comprehensive industry survey, which aimed to address and understand the key challenges for broadcasters.

About 270 leaders in the satellite industry participated in the survey which took place in the second half of 2014. The findings revealed our industry is vibrant and in a constant search for new growth and expansion, with 82 percent of broadcasters and broadcast service providers planning to launch additional services in the near future. In the past, the high CAPEX and OPEX required to roll out new services on dedicated satellite capacity and network infrastructure were often inhibitors to the business cases for new service launches. This is where today's multi-service networks make the difference. A multi-service network is a flexible, all IP-based platform that is shared to offer multiple services. Sharing satellite capacity, operational staff and ground infrastructure to deliver multiple services (video, radio, broadband, voice, file transfers, etc.) lowers the barrier to launch new services to the market significantly, while increasing business flexibility and agility in an ever changing world.

THE THREE KEY CAPABILITIES OF A MULTISERVICE NETWORK

A multiservice network has three key capabilities that need to co-exist in one and the same system. First of all, Newtec Dialog, Newtec's multiservice network, brings service and business flexibility. Flexibility is at the core of a multiservice network, and provides piece-of-mind to service providers and customers using the network. In fact, product and service offerings can be adjusted at any time to maximise the business opportunities. Newtec Dialog is a safe investment, future-proof to carry any existing or new media, voice or broadband service.

Secondly, scalability of the system (and investment) is imminent to successful incubation and launch of new service offerings. A portfolio of satellite terminals in terms of cost and performance for any frequency band, and a scalable hub, are prerequisites to scalability. The emerging market from High Throughput Satellite (HTS) networks benefits even more from scalable ground infrastructure than conventional networks do.

Thirdly of course is efficiency, which means two things. On the one hand, it implies effective use of assets and resources, workflows and time-scheduled transmissions that share satellite space segment and satellite modems in a reliable manner, avoiding any conflicts during transmission sessions. This implies a solid session and resource manager as well as trustful QoS and SLA management at the heart of the system. On the other hand, efficiency also alludes to efficient transmission.

SCPC AND MF-TDMA - HAVE YOU HEARD ABOUT MX-DMATM?

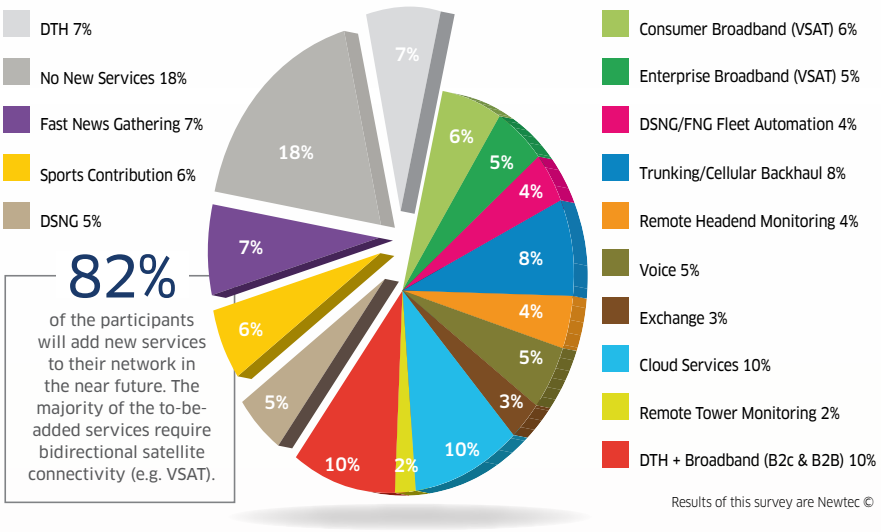
Newtec Dialog is unique because it has three different return technologies on-board. In traditional systems, customers have to choose during the network build between SCPC and MF-TDMA, making it a one-time choice. Newtec has three different technologies available that can be dynamically selected to offer optimal performance for a give service and user profile. In addition to SCPC links and MF-TDMA, a third and innovative technology is part of Newtec Dialog. Mx-DMA, a new highly efficient and patented return technology, combines the best features of MF-TDMA and SCPC technologies together.

NEWTEC DIALOG

Newtec Dialog is changing the landscape of Satellite News Gathering (SNG), sports contribution and exchange networks significantly. Furthermore, since the architecture is all-IP, it can perfectly interoperate with fiber optic networks (MPLS). Newtec Dialog changes the way we transmit breaking news, exchange high quality sports feeds, talk to each other, surf the Internet and share files over satellite.

Welcome to the new multiservice era! PRO

WHAT NEW SERVICES WILL YOU ADD IN THE NEAR FUTURE?



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